

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patrick Buckley on 5/29/2008.

The application has been amended as follows:

Claim 47 has been cancelled.

***Reasons for Allowance***

2. Claims 19, 25 and 31 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Claims 1 and 25 are allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose a memory device to store a table, the table to have a total number of N slots to store entries, with L of those slots already containing entries, where N is defined as an integer representing the total number of slots in the table, N further being expressible as a power of two with an integer exponent x, and where L is defined as an integer representing a number of slots that

already contain entries; and a processor coupled to the memory device, the processor to derive an integer index value for a component of a sub-stream, the index value indicating a slot of the table into which an entry associated with the component of the sub-stream is to be placed, where the index value is derived by swapping x bits of a binary representation of the number of entries L already in the table.

Claim 31 is allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose establishing a data structure in a memory unit, the data structure having a total number of N slots for entries, where N is defined as an integer representing the total number of slots in the data structure, N further being expressible as a power of two with an integer exponent x; storing entries into L slots of the data structure, where L is defined as an integer representing a number of slots that already contain entries; swapping x bits of a binary representation of L to produce an index value; and storing a new entry into the data structure, the new entry being stored into an entry represented by the index value produced by said swapping.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087. The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hong Cho/

Hong Cho  
Patent Examiner  
5/30/2008